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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,332	05/09/2001	Evin Feli	P12594-US1 (011317-057)	4808
24239	7590	11/19/2004	EXAMINER LY, ANH VU H	
MOORE & VAN ALLEN PLLC P.O. BOX 13706 Research Triangle Park, NC 27709			ART UNIT 2667	PAPER NUMBER

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,332

Applicant(s)

FELI ET AL.

Examiner

Anh-Vu H Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,5,10,11 and 16-19 is/are allowed.
- 6) ☒ Claim(s) 1-3,6-9,12-15 and 20-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 4, 8, 10, and 18 are objected to because of the following informalities:

With respect to claims 4 and 18, in line 5, examiner believes “an any particular time” should be changed to - -at any particular time- -.

With respect to claim 8, in lines 1-2 “the instructions for toggling the capacity flag toggle the capacity flag” is unclear.

With respect to claims 10 and 18, in lines 13-14 “a toggle flag” should be changed to - - the toggle flag- - since the same toggle flag being inputted to the OR function. Further, in line 14, “the max load flag” should be changed to - -the maximum load flag- -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 6-9, 12-15, and 20-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Budka (US Patent No. 6,014,567).

With respect to claims 1, 6, 9, 12, and 20, Budka discloses (col. 3, line 64 – col. 4, line 6 and Fig. 2A) that channel stream 203 has many more registered MESs than channel stream 201 or 205. To deter MESs from registering on stream 203 to control the imbalance, the channel capacity flag associated with stream 203 is marked “congested” (asserted state) while the flag

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associated with stream 201 or 205 is marked “un-congested” (unasserted state). Herein, each channel is marked while carrying data (channel is available) (for each channel, continuously toggling a capacity flag between an asserted state and an unasserted state while the channel is available). Budka discloses in Fig. 2A, stream 203 is marked as congested as long as it has more registered MESs than other streams. In other words, the channel capacity of stream 203 is full and would not support more registered MESs (for each channel, continuously asserting the capacity flag while the channel is unavailable). Budka discloses in Fig. 2B, that channel streams 211 and 213 are marked as congested while stream 215 is not marked. Herein, channel streams 211 and 213 are considered as one group of channels by examiner and channel stream 215 considered as another group of channels by examiner. Herein, each group of channels includes at least one or more channels as considered by the examiner (wherein, at any particular time, capacity flags are in the asserted state for all of a first group of available channels, while capacity flags are in the unasserted state for all of at least a second group of available channels, so that traffic is distributed among at least two channels). Budka discloses in Fig. 1, a system includes the base station 105 (at least one modem transceiver), CDPD network 103 (protocol including a plurality of layers), and plurality of MESs 101-1 to 101-k.

With respect to claims 2, 7, 14, and 15, Budka discloses (col. 4, lines 23-24) that the routine invocation times can be periodic or event driven (wherein the capacity flags for each available channel is toggled each period of a timer). Budka discloses in Fig. 2B that channel streams of the first group are marked as congested while channel stream of second group is not

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for the same period (wherein capacity flags for the first group and second group are in different states during the same period of the timer).

With respect to claim 3, Budka discloses (col. 4, lines 23-24) that the routine invocation times can be periodic or event driven. Further, Budka discloses in Fig. 2B, the capacity of channel stream 215 is less than capacity of maximized channel stream 213 (wherein, for each available channel, the capacity flag is toggled at random while the actual traffic load is less than the maximum load).

With respect to claim 8, as best understood, Budka discloses (col. 4, lines 23-24) that the routine invocation times can be periodic or event driven (wherein the instructions for toggling the capacity flag toggle the capacity flag at random).

With respect to claim 13, Budka discloses in Fig. 2A, stream 203 is marked as congested as long as it has more registered MESs than other streams. In other words, the channel capacity of stream 203 is full and would not support more registered MESs (wherein the programmable control block is further operable to continuously assert the capacity flag while the channel is unavailable because an actual traffic load on the channel is greater than or equal to the maximum load).

With respect to claim 21, Budka discloses in Fig. 1, a system includes the base station 105, CDPD network 103 (protocol including plurality of layers wherein the network layer

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comprises a subnetwork dependent convergence protocol sublayer), and plurality of MESs 101-1 to 101-k.

With respect to claims 22 and 23, Budka discloses in Fig. 1, a system includes the base station 105, CDPD network 103 (wherein plurality of layers operate in accordance with CDPD standard), and plurality of MESs 101-1 to 101-k.

Allowable Subject Matter

3. Claims 4-5, 10-11, and 16-19 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest setting the capacity flag by ORing the toggle flag and the maximum load flag, as suggested by independent claims 4, 10, 16, and 18.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sinha, P. et al "A Wireless Transmission Control Protocol for CDPD" Wireless Communications and Networking Conference, 1999 IEEE, 21-24 September 1999, pages 953-957, Vol. 2.


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl


CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 11/10/07